

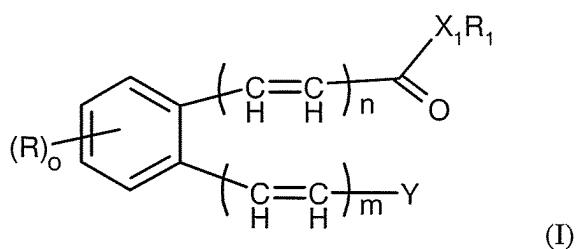
AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions including the claims in the application.

Listing of the Claims:

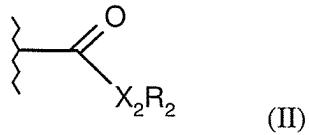
CLAIMS:

1. (Original) A compound of formula (I)

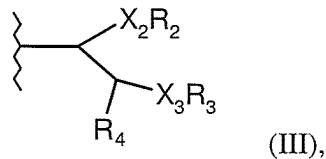


in which:

Y is a group of formula (II)



or of formula (III)



R is

H, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl or C₅-C₁₄-aryl, halogen, -CN, -OH, -O-C₁-C₆-alkyl, -O-C₂-C₆-alkenyl, -O-C₅-C₁₄-aryl, -O-C₂-C₆-alkynyl, -NH₂, -NH-C₂-C₆-alkyl, -NH-C₂-C₆-alkenyl, -NH-C₂-C₆-alkynyl, -NH-C₅-C₁₄-aryl, -N(-C₁-C₆-alkyl)₂, -N(-C₂-C₆-alkenyl)₂, -N(-C₂-C₆-alkynyl)₂, -N(C₅-C₁₄-aryl)₂, -NH[-C(=O)-(C₁-C₆-alkyl)], -NH[-C(=O)-(C₅-C₁₄-aryl)], -NH-O-R₁, -SH, -S-C₁-C₆-alkyl, -S-C₂-C₆-alkenyl, -S-C₁-C₆-alkynyl or -O-C₅-C₁₄-aryl, wherein the abovementioned substituents are unsubstituted or substituted, one or more times, by a substituent independently

selected from C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₅-C₁₄-aryl, where alkyl, alkenyl, alkynyl and aryl may be independently unsubstituted or substituted, once or twice, by a substituent independently selected from -OH, =O, -O-C₁-C₆-alkyl, -O-C₂-C₆-alkenyl, -O-C₅-C₁₄-aryl, -C₅-C₁₄-aryl, -NH-C₁-C₆-alkyl, -NH-C₂-C₆-alkenyl, -NH₂, and halogen, wherein alkyl, alkenyl, alkynyl and aryl can be further substituted by a -CN, amide or oxime,

R₁, R₂, R₃ and R₄ are, independently of each other,

H, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl or C₅-C₁₄-aryl,

in which alkyl, alkenyl, alkynyl and aryl are unsubstituted or substituted, once or twice, by a substituent independently selected from -OH, -O-C₁-C₆-alkyl, -O-C₂-C₆-alkenyl, -O-C₅-C₁₄-aryl, -C₅-C₁₄-aryl, -NH-C₁-C₆-alkyl, -NH-C₂-C₆-alkenyl, -NH₂ and halogen, in which alkyl, alkenyl, alkynyl and aryl are independently unsubstituted or substituted, once or twice, by a substituent independently selected from -OH, =O, -O-C₁-C₆-alkyl, -O-C₂-C₆-alkenyl, -O-C₅-C₁₄-aryl, -C₅-C₁₄-aryl, -NH-C₁-C₆-alkyl, -NH-C₂-C₆-alkenyl, -NH₂ and halogen, in which said alkyl, alkenyl, alkynyl and aryl can be further independently substituted by a -CN, amide or oxime,

X₁, X₂ and X₃ are, independently of each other, selected from

-CH₂-, -CHR-, -NH-, -N(C₁-C₆-alkyl)-, -N(C₂-C₆-alkenyl)-, -N(C₂-C₆-alkynyl)-, -N[-C(=O)-(C₁-C₆-alkyl)]-, -N[-C(=O)-(C₅-C₁₄-aryl)]-, -N(C₅-C₁₄-aryl)-, -N(O-R)-, -O- and -S-,

n and m are, independently of each other,

2, 3, 4 or 5, and

o is

0, 1, 2 or 3,

excluding, however, compounds of formula (I) in which

o is 0,

n is 2,

m is 2 or 3,

X₂ and X₃ are O, and

R₂ and R₃ are C₂H₅,

and all double bonds possess the trans-configuration,

and/or stereoisomeric forms of compounds of formula (I) and/or a mixture of these forms in any ratio, and/or physiologically tolerated salts of compounds of formula (I).

2. (Previously presented) A compound of formula (I) as claimed in claim 1, wherein at least one polyene group has at least one *cis* double bond.

3. (Original) A compound of formula (I) as claimed in claim 1, wherein

R is H,

R₁ is H or C₁-C₆-alkyl,

R₂ is H or C₁-C₆-alkyl,

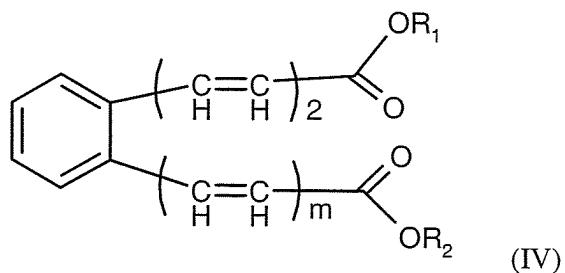
R₃ is H or C₁-C₆-alkyl,

R₄ is C₁-C₆-alkyl, and

X₁ and X₂ are -O-,

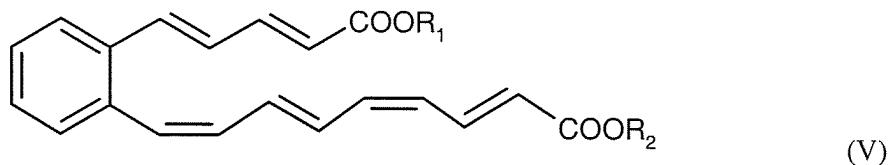
and the physiologically tolerated salts thereof.

4. (Original) A compound of formula (I) as claimed in claim 1, which is a compound of formula (IV)



wherein m is 3 or 4, and R₁ and R₂ are as defined in claim 1 and the physiologically tolerated salts thereof.

5. (Currently amended) A compound of formula (I) as claimed in claim 1, which is a compound of formula (V)



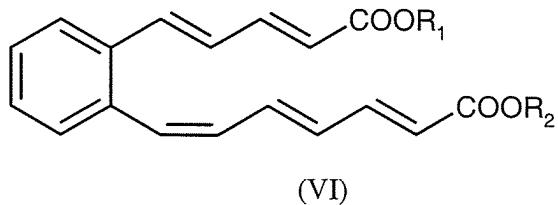
wherein R₁ and R₂ are as defined in claim 1 independently of each other,

H, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl or C₅-C₁₄-aryl,

in which alkyl, alkenyl, alkynyl and aryl are unsubstituted or substituted, once or twice, by a substituent independently selected from -OH, -O-C₁-C₆-alkyl, -O-C₂-C₆-alkenyl, -O-C₅-C₁₄-aryl, -C₅-C₁₄-aryl, -NH-C₁-C₆-alkyl, -NH-C₂-C₆-alkenyl, -NH₂ and halogen, in which alkyl, alkenyl, alkynyl and aryl are independently unsubstituted or substituted, once or twice, by a substituent independently selected from -OH, =O, -O-C₁-C₆-alkyl, -O-C₂-C₆-alkenyl, -O-C₅-C₁₄-aryl, -C₅-C₁₄-aryl, -NH-C₁-C₆-alkyl, -NH-C₂-C₆-alkenyl, -NH₂ and halogen, in which said alkyl, alkenyl, alkynyl and aryl can be further independently substituted by a -CN, amide or oxime.

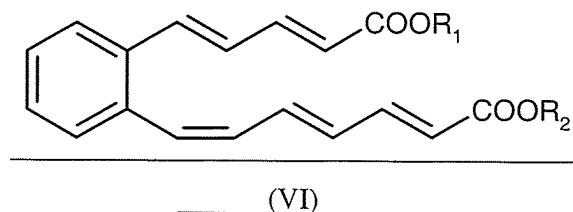
6. (Original) A compound of formula (V) as claimed in claim 5, wherein each of R₁ and R₂ is H.

7. (Original) A compound of formula (I) as claimed in claim 1, which is a compound of formula (VI)



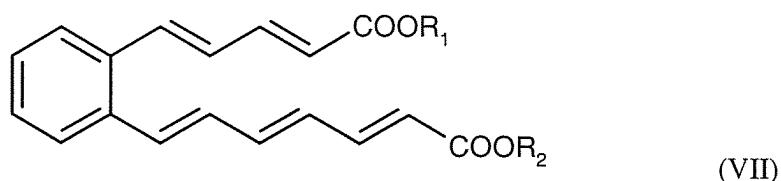
wherein R₁ and R₂ are as defined in claim 1.

8. (Currently amended) A compound of formula (VI) as claimed in claim 7,



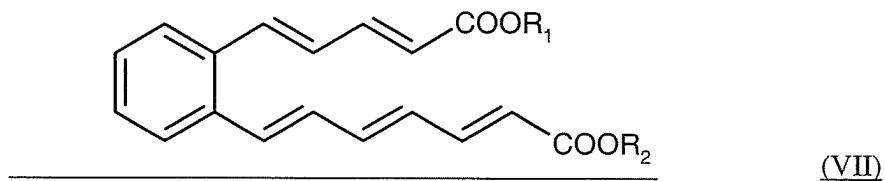
wherein R₁ and R₂ are each H.

9. (Original) A compound of formula (I) as claimed in claim 1, which is a compound of formula (VII)



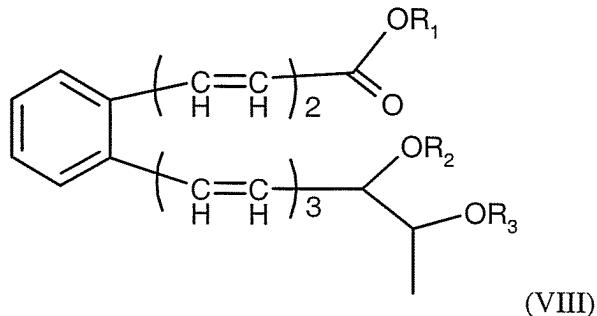
wherein R₁ and R₂ are as defined in claim 1.

10. (Currently amended) A compound of formula (VII) as claimed in claim 9,



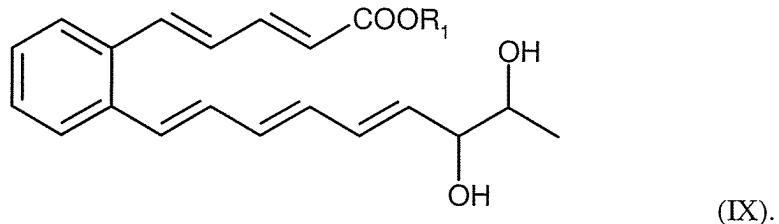
wherein R₁ and R₂ are each H.

11. (Currently amended) A compound of formula (I) as claimed in claim 1, which is a compound of formula (VIII)



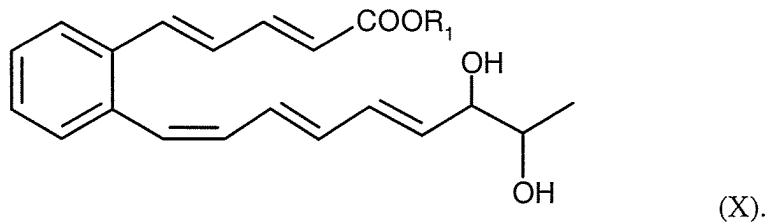
wherein R₁ and R₂ are as defined in claim 1.

12. (Original) A compound of formula (VIII) as claimed in claim 11, which is a compound of formula (IX)



13. (Original) A compound of formula (IX) as claimed in claim 12, wherein R₁ is H.

14. (Original) A compound of the formula (VIII) as claimed in claim 11, which is a compound of formula (X)



15. (Original) A compound of formula (X) as claimed in claim 14, wherein R₁ is H.

16. (Previously presented) A process for preparing a compound of formula (I) as claimed in claim 1, which comprises

1. culturing the microorganism *Actinomycetales* sp. DSM 14865 in an aqueous nutrient medium until one or more of the compounds serpentemycin A, B, C and D accrues in the culture broth, and
2. isolating and purifying said serpentemycin A, B, C and/or D.

17. (Cancelled)

18. (Previously presented) A process as claimed in claim 16, which comprises fermenting the microorganism *Actinomycetales* sp. DSM 14865 in a culture medium which contains a carbon and nitrogen source and also the customary inorganic salts and trace elements, isolating serpentemycins A, B, C and/or D and, optionally, converting said serpentemycins A, B, C and/or D into a pharmacologically tolerated salt.

19. (Original) A process as claimed in claim 16, wherein the fermentation is carried out under aerobic conditions at a temperature of between 20 and 35°C and at a pH between 4 and 10.

20. (Currently amended) A method for the treatment of an infectious bacterial disease comprising administering to a patient in need thereof an antibacterially effective amount of a compound of claim 15.

21. (Currently amended) A pharmaceutical composition for the treatment of infectious bacterial diseases comprising at least one compound as claimed in claim 15 and one or more physiologically suitable auxiliary substances.

22. (Currently amended) A process for producing a pharmaceutical composition ~~as claimed in claim 21 for the treatment of infectious bacterial diseases~~, which comprises combining at least one

compound as claimed in claim 45, with one or more physiologically suitable auxiliary substances, into a suitable form for administration.

23. (Previously presented) The isolated microorganism *Actinomycetales* sp., DSM 14865.